IN THE CLAIMS

1. (original) An optical element for providing wavefront aberration compensation with a first radiation beam having a first polarization and a second radiation beam having a substantially orthogonal, second polarization, the optical element including a part formed of polarization sensitive material and having a surface to be located in the path of the first and second radiation beams, said surface comprising a phase structure in the form of stepped annular zones, the zones forming a non-periodic pattern of optical paths of different lengths, differences in the optical paths for the first radiation beam and the optical paths for the second radiation beam providing a difference in wavefront aberration compensation in the first and second beams respectively.

2. (original) An optical element according to claim 1, wherein the difference in wavefront aberration compensation approximates to spherical aberration.

3. (original) An optical element according to claim 1, wherein the wavefront aberration compensation is approximately zero for the second radiation beam when the second radiation beam consists of a predetermined wavelength.

4. (original) An optical element according to claim 1, wherein the polarization-sensitive part is formed of material having a substantially uniform birefringence throughout.

5. (original) An optical element according to claim 1, further comprising a ~~part~~ plate having the effect of a quarter wavelength retarder.

6. (original) An optical element according to claim 5, wherein the retarder plate is attached to the polarization sensitive part along a planar interface.

7. (original) An optical element according to claim 1, further comprising a part formed of non-polarization sensitive material, the non-polarization sensitive part interfacing with the polarization sensitive part along said surface.

8. (original) An optical element according to claim 7, wherein the polarization-sensitive material exhibits a first refractive index for radiation of said first polarization and a second refractive index for radiation of said second polarization, and wherein the refractive index of the non-polarization sensitive material is selected to match said second refractive index.

9. (original) An optical element according to claim 1, wherein said surface includes between 5 and 25 zones.

Currently Amended

10. (~~withdrawn~~) An optical scanning device for scanning an optical record carrier comprising an information layer, the device comprising a radiation source for generating a radiation beam and an objective lens, located in an optical path between the radiation source and the information layer, for converging the radiation beam to a spot on the information layer, wherein the device ~~comprises~~ includes an

optical element ~~according to claim 1~~ for providing wavefront aberration compensation with a first radiation beam having a first polarization and a second radiation beam having a substantially orthogonal, second polarization, the optical element including a part formed of polarization sensitive material and including a surface to be located in the path of the first and second radiation beams, said surface comprising a phase structure in the form of stepped annular zones, the zones forming a non-periodic pattern of optical paths of different lengths, differences in the optical paths for the first radiation beam and the optical paths for the second radiation beam providing a difference in wavefront aberration compensation in the first and second beams respectively.

11. (~~withdrawn~~ original) An optical scanning device according to claim 10, wherein the device comprises a collimator lens, wherein the optical element is located between the collimator lens and the objective lens.

12. (~~withdrawn~~ original) An optical scanning device according to claim 10, comprising an electro-optical element switchable between a first state, in which the polarization of light exiting the electro-optical element has a first orientation relative to a predetermined polarization of light entering the electro-optical element, and a second state in which the polarization of light exiting the electro-optical element has a second orientation relative to said predetermined polarization, the first and second orientations being substantially orthogonal.

13. (~~withdrawn~~) An optical scanning device according to claim 12, wherein the optical characteristics of the electro-optical element are altered under control of a selection signal selectively indicating one of at least two discrete information layer depths to be scanned.

14. (~~withdrawn~~) An optical scanning device according to claim 10, wherein the beam emerging from the objective lens is arranged to impinge on the record carrier with a numerical aperture greater than 0. 7.

15. (~~withdrawn~~) An optical scanning device according to claim 10, the objective lens being mounted in mechanical actuation means for performing servo-based correction of the position of the objective lens during scanning of the optical record carrier, wherein the optical element is commonly mounted with said objective lens, in fixed relation thereto, in said mechanical actuation means.

16. (~~withdrawn~~) An optical scanning device according to claim 10, wherein said surface interfaces with air.

17. (~~withdrawn~~) A method of operating the optical scanning device of claim 10, comprising reading an information layer of the record carrier during a scanning operation, and altering the optical characteristics of the device during the scanning operation in order to compensate for a wavefront aberration generated in the record carrier.

18. (~~withdrawn~~) A method of operating the optical scanning device of claim 10, comprising writing data to an information layer of the record carrier during a scanning

operation, and altering the optical characteristics of the device during the scanning operation in order to compensate for a wavefront aberration generated in the record carrier.

19. (new) The optical element of claim 5 wherein: the quarter wave plate is separated from the polarization-sensitive part; and the phase structure surface of the polarization-sensitive part interfaces only with air.

20. (new) The optical element of claim 6 wherein: the phase structure surface of the polarization-sensitive part interfaces only with air.

21. (new) The optical element of claim 6 wherein: the phase structure surface of the polarization-sensitive part interfaces with a non-polarization sensitive material and the central portion of the retarder plate is completely separated from the non-polarization sensitive material by the polarization-sensitive part.

22. (new) The optical element of claim 6 wherein: the phase structure surface of the polarization-sensitive part interfaces with a non-polarization sensitive material; and the central portion of the retarder plate is separated from the non-polarization sensitive material by the polarization-sensitive part.